

In the Specification

Please amend lines 1-3 on page 2 as follows

Figure 3 is a block diagram of one embodiment of operation 207 of Figure 2 showing equations utilized for obtaining ~~eohereences~~ coherencies from the results of the power characterization tests according to the present invention.

Please amend the paragraph beginning on page 4, line 2 as follows:

In one embodiment, the power consumption log is a cycle by cycle power consumption profile of the circuit during the simulated tests. This profile, in one embodiment, is obtained from a combination of profiles of the gate/macro external power consumption and profiles of gate/macro internal power consumption. In one embodiment, profiles of the gate/macro external power consumption are derived from the switching activities of the nets that are connected to inputs and outputs of a simulated circuit during the tests and their associated net capacitances. In one embodiment, the profiles of the gate/macro internal power consumption are derived from the inputs and output of a simulated circuit using appropriate power models. In one embodiment, such power models are set forth in US patent 6,910,025, ~~application~~ entitled "Modeling Behavior of an Electrical Circuit," having Lipeng Cao as inventor, having a common assignee, having a filing date of November 20, 2001, an application number 09/989,325, and a publication number of US 2003/0097348 A1, all of which is hereby incorporated by reference in its entirety. The inputs of the power model are derived from switching activities of the nets of the tests and the associated net capacitances of the inputs and outputs of the simulated circuits. In one embodiment, the models provide representations of both dynamic power consumption and leakage power consumption.

Please amend the paragraph being on page 7, line 15 as follows:

Figure 3 is a block diagram of one embodiment of operation 207 showing equations utilized for obtaining ~~eohereences~~ coherencies from the results of the power characterization tests. In 303, a Fourier transform (equation 313) is made for each signal applied to an input for each test to convert that signal to the frequency domain. A Fourier transform (equation 315) is made

of each power consumption log for each test to convert those logs into the frequency domain. In Figure 3, X represents an input, and Y represents power.

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